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EXAMINER

KHAN, USMAN A

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/648,135	Applicant(s) MIZUKAMI ET AL.	
	Examiner USMAN KHAN	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,7,13 and 19-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,7,13 and 23-39 is/are rejected.
- 7) ☒ Claim(s) 19-21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

Applicant's arguments filed on 12/11/2007 with respect to claims 1, 7, and 13 have been considered but are moot in view of the new ground(s) of rejection.

Regarding objection to specification provided in the previous office action for failing to provide a descriptive title. Applicant has amended the title of the invention to overcome the objection to the specification.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 7, 13, 34 – 36, and 40 - 42 are rejected under 35 U.S.C. 102(e) as being anticipated by Avinash (US patent No. 6,173,083).

Regarding **claim 1**, Avinash teaches an image forming method for forming an optimum viewing image on an output medium based on captured, image data outputted from an image-capturing device, the image forming method comprising:

generating scene-referred image data (figure 3, it is inherent that an image will be inputted before step 62 and processed through step 76), by applying a smoothing processing (figure 3 steps 68 and 70), and a compensating processing to compensate

photographing apparatus characteristics (figure 3 steps 62, 64, and 66), on the basis of the captured-image data (figure 3, it is inherent that an image will be inputted before step 62 and processed through step 76); and generating viewing image referred image data by applying a sharpening processing on the basis of the generated scene-referred image data (figure 3 item 72).

Regarding **claim 7**, Avinash teaches an image processing apparatus which applies image processing for forming an optimum viewing image on an output medium based on captured-image data outputted from an image-capturing device comprising:

a scene-referred image data generation section for generating scene-referred image data (figure 3, it is inherent that an image will be inputted before step 62 and processed through step 76), wherein the scene-referred image data generation section comprises a smoothing processor to apply a smoothing processing (figure 3 steps 68 and 70), and a compensation processor to apply a compensation processing to compensate photographing apparatus characteristics (figure 3 steps 62, 64, and 66), on the basis of the captured-image data (figure 3, it is inherent that an image will be inputted before step 62 and processed through step 76); a viewing image referred image data generation section for generating viewing image referred image data (figure 3, it is inherent that an image will be inputted before step 62 and processed through step 76), wherein the viewing image referred image data generation section comprises a sharpening processor to apply a sharpening processing on the basis of the scene-referred image data (figure 3 item 72).

Regarding **claim 13**, Avinash teaches an image recording apparatus which applies image processing for forming an optimum viewing image on an output medium to captured-image data outputted from an image-capturing device, and outputs the optimum viewing image on the output medium comprising:

a scene-referred image data generation section for generating scene-referred image data (figure 3, it is inherent that an image will be inputted before step 62 and processed through step 76), wherein the scene-referred image data generation section comprises a smoothing processor to apply a smoothing processing (figure 3 steps 68 and 70), and a compensation processor to apply a compensation processing to compensate photographing apparatus characteristics (figure 3 steps 62, 64, and 66), on the basis of the captured-image data (figure 3, it is inherent that an image will be inputted before step 62 and processed through step 76); a viewing image referred image data generation section for generating viewing image referred image data (figure 3, it is inherent that an image will be inputted before step 62 and processed through step 76), wherein the viewing image referred image data generation section comprises a sharpening processor to apply a sharpening processing on the basis of the scene-referred image data (figure 3 item 72).

Regarding **claims 34 - 36**, as mentioned above in the discussion of claim 1, 7, and 13 respectively, Avinash teaches all of the limitations of the parent claims. Additionally, Avinash teaches that the captured-image data outputted from the image-

capturing device are the scene-referred image data (figure 3, it is inherent that an image will be inputted before step 62 and processed through step 76).

Regarding **claims 40 - 42**, as mentioned above in the discussion of claim 1, 7, and 13 respectively, Avinash teaches all of the limitations of the parent claims. Additionally, Avinash teaches that the captured-image data outputted from the image-capturing device are the viewing image referred image data (figure 3, it is inherent that an image will be inputted before step 62 and processed through step 76).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22 - 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Avinash (US patent No. 6,173,083) in further view of Keyes et al. (US patent No. 6,091,861).

Regarding **claims 22 - 24**, as mentioned above in the discussion of claim 1, 7, and 13 respectively, Avinash teaches all of the limitations of the parent claims.

However, Avinash fails to teach that an amount of application of the sharpening processing is adjusted in accordance with a kind of the output medium.

More specifically, Keyes et al. teaches that an amount of application of the sharpening processing is adjusted in accordance with a kind of the output medium (Abstract, column 3 line 45 – column 4 line 7 i.e. type of media).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Keyes et al. with the teachings of Avinash because in column 4 lines 35 – 42 Keyes et al. teaches that the invention allows for one sharpening level to be assigned to each image to simplify the sharpening operation, relative to the prior art, and to make the sharpening calculation more efficient and practical to use in photofinishing applications.

Regarding **claims 25 - 27**, as mentioned above in the discussion of claim 1, 7, and 13 respectively, Avinash teaches all of the limitations of the parent claims.

However, Avinash fails to teach that an amount of application of the sharpening processing is adjusted in accordance with a size of the output medium.

More specifically, Keyes et al. teaches that an amount of application of the sharpening processing is adjusted in accordance with a size of the output medium (Abstract, column 3 line 45 – column 4 line 7; image size is adjusted by media type which will be based on size).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Keyes et al. with the teachings of Avinash because in column 4 lines 35 – 42 Keyes et al. teaches that the invention allows for one sharpening level to be assigned to each image to simplify the sharpening

operation, relative to the prior art, and to make the sharpening calculation more efficient and practical to use in photofinishing applications.

Claims 28 – 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Avinash (US patent No. 6,173,083) in further view of Lee et al. (US patent No. 5,627,908).

Regarding **claims 28 - 30**, as mentioned above in the discussion of claim 1, 7, and 13 respectively, Avinash teaches all of the limitations of the parent claims.

However, Avinash fails to teach that an amount of application of the sharpening processing is adjusted in accordance with the size of a main photographic object.

More specifically, Lee et al. teaches that an amount of application of the sharpening processing is adjusted in accordance with the size of a main photographic object (column 15 lines 37 – 59 and column 19 lines 6 – 29 size of object).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Lee et al. with the teachings of Avinash to have a proper amount of sharpening for sized shape, and location based subjects.

Regarding **claims 31 - 33**, as mentioned above in the discussion of claim 1, 7, and 13 respectively, Avinash teaches all of the limitations of the parent claims.

However, Avinash fails to teach that an amount of application of the sharpening processing is adjusted in accordance with a photographed scene.

More specifically, Lee et al. teaches that an amount of application of the sharpening processing is adjusted in accordance with a photographed scene (column 15 lines 37 – 59 and column 19 lines 6 – 29).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Lee et al. with the teachings of Avinash to have a proper amount of sharpening for sized shape, and location based subjects.

Claims 37 - 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Avinash (US patent No. 6,173,083) in further view of Examiners Official Notice.

Regarding **claims 37 - 39**, as mentioned above in the discussion of claims 1, 7, and 13 respectively, Avinash teaches all of the limitations of the parent claims. Additionally, Avinash teaches that the captured-image data outputted from the image-capturing device are scene-referred data,

However, Avinash fails to teach that the scene-referred data is RAW data.

The examiner takes Official Notice that it is old and well known in the art to have RAW images outputted and saved in memory.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use RAW data since RAW image data is easier to manipulate and edit later in processing.

Allowable Subject Matter

Claims 19 - 21 are objected to as being dependent upon rejected base claims, but would be allowable if rewritten in independent forms including all of the limitations of the base claims and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter for **claims 19 - 21**: “the smoothing processing is carried out by means of a filter to change mask sizes, mask shapes, and threshold values, on the basis of the noise characteristic of image data” is not discussed or suggested in any of the prior art that was searched.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usman Khan whose telephone number is (571) 270-1131. The examiner can normally be reached on Mon-Thru 6:45-4:15; Fri 6:45-3:15 or Alt. Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Usman Khan/

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03/10/2008
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